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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,786	08/09/2001	James Davis	081607-1150	5372

6980 7590 01/22/2007
TROUTMAN SANDERS LLP
600 PEACHTREE STREET, NE
ATLANTA, GA 30308

EXAMINER

CHANG, JULIAN

ART UNIT	PAPER NUMBER
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2152

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/925,786	Applicant(s) DAVIS ET AL.	
	Examiner Julian Chang	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is responsive to communication filed on 11/02/2006. Claims 1-27 are pending.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/02/2006 has been entered.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-6 and 8-26, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham et al. (US 6,124,806), hereafter "Cunningham" in view of Robert E. Kahn (The Organization of Computer Resources into a Packet Radio Network, IEEE, 1977, hereinafter "Robert").

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5. Regarding claims 1 and 23, Cunningham discloses the invention including a site controller (DCM 112, Fig. 1) adapted to be used in an automated monitoring system configured for monitoring and controlling a plurality of remote devices (SIM 102, Fig. 1) via a host computer connected to a first communication network (CN 118, Fig. 1), the site controller configured for controlling communication with the host computer (HM 120, Fig. 1) and a plurality of communication devices that define a second communication network associated with the plurality of remote devices (108, Fig. 1; col. 4, lines 47-67), wherein the second communication network comprises a first communication device associated with a first remote device and a second communication device associated with a second remote device (Master Telemetry Network Repeater 6330; Telemetry Network Repeater 6328; Telemetry gateway 6326, Telemetry Interface Modules 6318, 6320, and 6324, Fig. 49), the site controller comprising:

- a transceiver configured to communicate with the plurality of communication devices via the second communication network (2008, Fig. 25; and inherent in col. 4, lines 56-60; and col. 6, lines 11-18; 45-49);

- a network interface device configured to communicate with the host computer via the first communication network (inherent in col. 4, lines 60-62; and col. 7, lines 19-24);

- logic configured to:

- manage communication with each of the plurality of communication devices (col. 22, line 8 to col. 23, line 57; and Figs. 35 and 36). via a first communication protocol (col. 12, lines 52-59; and col. 33, line 45 to col. 34, line 49), based on one or more communication paths for each of the plurality of

communication devices, and the identification of each of the plurality of communication devices in the one or more communication paths (col. 14, lines 27-31, Fig. 21); and

manage communication with the host computer via a second communication protocol (col. 45, line 54 to col. 46, line 5).

Cunningham does not explicitly disclose each communication path comprising one or more communication devices involved in the communication link between the transceiver and each of the plurality of communication devices. Robert, on the other hand, discloses in a similar art that each communication path comprising one or more communication devices involved in the communication link between the transceiver and each of the plurality of communication devices (Fig. 5; pages 173-174 under SYSTEM STRUCTURE).

It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Cunningham and Robert because Robert's teachings would enhance Cunningham's system by providing an effective to interconnect communication devices and achieve area coverage beyond line of sight (see, Robert abstract), as well as satisfying the need for reliable backup of all the critical system functions (see, Robert, page 171, left column, 2nd paragraph).

6. Regarding claim 15, the claim is rejected for the same reasons as claims 1 and 23 above. In addition, Cunningham discloses a method for controlling communication with a host computer (Host Module HM 122, Fig 1) connected to a first communication

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network (Communication network CN 118, Fig. 1) and a plurality of communication devices (Sensor Interface Module SIM 102, Fig. 1) that define a second communication network (hardwire or Wireless transmission 108, Fig. 1) associated with a plurality of remote devices (inherent) that are to be monitored and controlled by the host computer (Host Module HM 122, Fig. 1), the method comprising the steps of:

determining a unique address for each of the plurality of communication devices by receiving an initialization message (inherent in col. 13, lines 54-56; col. 14, lines 12-20; and col. 15, lines 4-12);

determining with which of the plurality of communications devices that each of the plurality of communication devices has a communication link (inherent in col. 6, lines 20-50);

based on the plurality of unique addresses and which of the plurality of communications devices each of the plurality of communication devices has a communication link with, determining one or more communication paths associated with each of the plurality of communication devices (inherent in col. 6, line 51 to col. 7, line 17; and col. 16, lines 20-35);

managing communication with each of the plurality of communication devices (col. 22, line 8 to col. 23, line 57; and Figs. 35 and 36), via a first communication protocol (col. 12, lines 52-59; and col. 33, line 45 to col. 34, line 49), based on or more of the communication paths associated with each of the plurality of communication devices (col. 6, lines 20-31; and 108, Fig. 1), and the identification of each of the

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plurality of communication devices in the one or more communication paths (col. 14, lines 27-31, Fig. 21); and

managing communication with the host computer via a second communication protocol (col. 45, line 54 to col. 46, line 5).

Robert discloses determining a first communication path associated with a first communication device of the plurality of communication devices, the first communication path comprising a second communication device of the plurality of communication devices in communication with the first communication device, wherein the first communication device is associated with a first remote device and the second communication device is associated with a second remote device (Fig. 5; pages 173-174 under SYSTEM STRUCTURE).

7. The rejection of claims 2-6, 8-14, 16-22 and 24-26 in the Office action mailed on 05/02/2006 is maintained, and is hereby incorporated by reference.

8. Claims 7 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham in view of Robert as applied to claims 1-6 and 8-26 above, and further in view of Jil A. Westcott (Issues in Distributed Routing for Mobile Packet Radio networks), IEEE, 1982, hereinafter "Jil".

9. The rejection of claims 7 and 27 in the Office action mailed on 05/02/2006 is maintained, and is hereby incorporated by reference.

Response to Arguments

10. Applicant's arguments filed 11/02/2006 have been fully considered but they are not persuasive.

a. With regard to claims 1, 15 and 23, applicant contends that the limitation of identifying each of a plurality of communication devices was not addressed in the rejection. The Office sincerely apologizes for the omission. Cunningham teaches the identification of the communications devices at column 14, lines 27-31, and also in figure 21. The identification of the communications devices is a crucial part of Cunningham's invention. The SIM identifiers are needed to determine a customer's identity for billing purposes.

b. Also in regard to claims 1, 15 and 23, applicant argues that the repeater of Robert teaches away from "smart" repeaters, as described in the instant application. This may be true. However, Robert teaches in his paper more than just a repeater. In fact, Robert teaches a packet radio at a terminal, a packet radio at a station and a repeater. It is true that it was the intent of Robert to limit the functionality of the repeaters to simply retransmission of packets received. However, Robert teaches that a packet radio at a station is logically equivalent to a packet radio at a terminal, but may also serve as a repeater in a multi-station scenario (page 174, right column). The packet radio at a station has the

functionality of both a packet radio at a terminal and a repeater, and can be considered a "smart" repeater.

c. Finally, applicant contends that the Office failed to provide a reasonable expectation of success as required by MPEP 2143. However, MPEP 2143 only requires that a reasonable expectation of success be present in the references themselves, and does not require the Office to provide it. Moreover, the Office has no reason to believe the repeaters of Robert to be unsuccessful in providing extended communication to the devices taught by Cunningham. The system of Cunningham communicates via packets (See. Fig. 21), and the system of Robert provides extended communication through the use of packet repeaters.

Conclusion

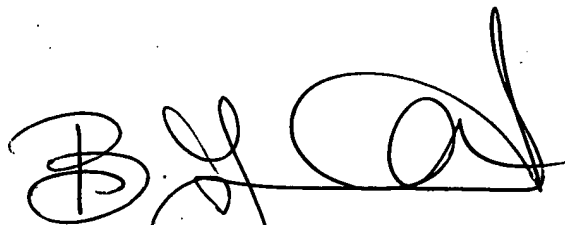
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Chang whose telephone number is (571) 272-8631. The examiner can normally be reached on Monday thru Friday 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JC



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SUPERVISORY PATENT EXAMINER